CLAIMS:

1. A process for sterilizing objects in a sterilization chamber in which a vacuum prevails, in which sterilization chamber a vapour mix consisting of water steam and hydrogen peroxide steam is fed without the use of carrier gas, the said vapour mix being deposited in the form of a condensate layer abruptly on the surfaces of the objects to be sterilized and on the surfaces of the sterilization chamber, whereafter the condensate layer is subsequently sucked out by means of further evacuation of the sterilization chamber, wherein at least one of the surfaces of the objects to be sterilized and the sterilization chamber are pre-heated to a pre-determined temperature.

2. A process according to claim 1, wherein the surfaces are pre-heated by means of installed heating devices.

3. A process according to claim 1, wherein the surfaces are pre-heated with warm air.

4. A process according to claim 3, wherein a regulated sterile air current supplies the warm air.

5. A process according to claim 1, wherein the entire sterilization chamber is pre-heated.

6. A process according to claim 1, wherein individual areas of the sterilization chamber are intentionally pre-heated.

7. A process according to claim 1, wherein the objects are pre-heated before they are guided into the sterilization chamber.

8. A process according to claim 1, wherein the objects are subject to a rapid-acting hot air current after the condensate layer has been sucked out.